Notice of Allowability	Application No.	Applicant(s)	
	10/632,000	WOLMAN, ABEL	
	Examiner	Art Unit	
	DIANE D. MIZRAHI	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *1-5-07*.

2. ☒ The allowed claim(s) is/are *1-25,27-44,47-50 and 53-58 (renumbered 1-53)*..

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *1-20-07* .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DIANE MIZRAHI
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Keith Cushing on January 20, 2007.

The application has been amended as follows:

This amends the amendment filed on 1-5-07.

1. (Currently Amended) A data scaling method comprising the steps of:
(a) receiving data;
(b) forming two partitions of the received data;
(c) applying admissible geometrization to the ~~doubly~~ partitioned received data to produce admissibly transformed data; and
(d) interpreting the admissibly transformed data as scaled data.

2. (Previously Presented) The data scaling method of claim 1 wherein the received data comprises one or more scale types.

3. (Previously Presented) The data scaling method of claim 1 wherein step (b) further comprises the steps of:
(b1) creating one or more data structures from the partitioned received data; and
(b2) associating a scale type to each subset of a partition of the received data.

4. (Previously Presented) The data scaling method of claim 3 wherein in step (b2) the scale types associated to each subset of the partition correspond to scale types from the received data.

5. (Previously Presented) The data scaling method of claim 3 wherein in step (b1) one or more of the data structures contain one or more elements selected from the group consisting of missing values and augmenting values.

6. (Previously Presented) The data scaling method of claim 3 wherein in step (b1) the one or more data structures comprise one or more complete graphs.

7. (Previously Presented) The data scaling method of claim 6 further comprising mapping the received data to edge weights of the one or more complete graphs

8. (Previously Presented) The data scaling method of claim 3 wherein in step (b1) the one or more data structures comprise one or more symmetric matrices.

9. (Previously Presented) The data scaling method of claim 8 further comprising direct substitution of the received data into the one or more symmetric matrices.

10. (Previously Presented) The data scaling method of claim 8 wherein the symmetric matrices are selected from the group consisting of ideal node matrices and hybrid matrices.

11. (Previously Presented) The data scaling method of claim 8 wherein the symmetric matrices are hollow symmetric matrices.

12. (Currently Amended) The data scaling method of claim 1 wherein step (c) comprises applying 2-partition individual differences multidimensional scaling to the ~~doubly~~ partitioned received data.

13. (Previously Presented) The data scaling method of claim 12 further comprising the steps of:

creating proximity weights; and

applying 2-partition individual differences multidimensional scaling using the proximity weights.

14. (Previously Presented) The data scaling method of claim 12 further comprising the steps of:

applying 2-partition individual differences multidimensional scaling over a plurality of dimensions;

producing admissibly transformed data for each of the plurality of dimensions;

merging the admissibly transformed data from the plurality of dimensions; and

interpreting the merged admissibly transformed data as scaled data.

15. (Previously Presented) The data scaling method of claim 12 wherein the admissibly transformed data are pseudo-distances or disparities.

16. (Previously Presented) The data scaling method of claim 1 wherein step (c) further comprises the step of:

forming commensurate admissibly transformed data.

17. (Previously Presented) The data scaling method of claim 1 further comprising combining the received data and the admissibly transformed data values to produce a scale conversion model.

18. (Previously Presented) The data scaling method of claim 1 wherein the received data are selected from the group consisting of classified data for a predetermined characteristic among a plurality of input domains and measured data for a predetermined characteristic among a plurality of input domains and survey data for a predetermined characteristic among a plurality of input domains and scoring data for a predetermined characteristic among a plurality of input domains and rating data for a predetermined characteristic among a plurality of input domains and ranking data for a predetermined characteristic among a plurality of input domains and preference data for a predetermined characteristic among a plurality of input domains.

19. (Currently Amended) A data scaling method comprising the steps of:
(a) receiving data;
(b) partitioning the received data;
(c) forming one or more symmetric matrices from the partitioned received data;
(d) forming a second partition of the received data;
(e) associating a scale type to each subset of the second partition of the received data;
(f) applying admissible geometrization to the ~~doubly~~ partitioned received data to produce admissibly transformed data; and
(g) interpreting the admissibly transformed data as scaled data.

20. (Previously Presented) The data scaling method of claim 19 wherein the received data comprises one or more scale types said scale types forming the scale types of the subsets of the second partition of the received data.

21. (Previously Presented) The data scaling method of claim 19 wherein step (c) further comprises forming the one or more symmetric matrices using direct substitution of the received data into the symmetric matrices.

22. (Previously Presented) The data scaling method of claim 19 wherein the one or more symmetric matrices of step (c) further comprise one or more hollow symmetric matrices.

23. (Currently Amended) The data scaling method of claim 19 wherein step (f) comprises applying 2-partition individual difference multidimensional scaling to the ~~doubly~~ partitioned received data.

24. (Previously Presented) The data scaling method of claim 19 further comprising resampling over a plurality of rearrangements of the received data.

25. (Previously Presented) A data scaling method comprising the steps of:
(a) receiving data;

(b) creating a plurality of rearrangements of the received data;

(c) applying admissible geometrization to each of the plurality of rearrangements of the received data to produce a plurality of sets of admissibly transformed data;

(d) merging the plurality of sets of admissibly transformed data; and

(e) interpreting the merged data as scaled data.

26. (Cancelled)

27. (Currently Amended) A method for merging data comprising the steps of:

(a) receiving data;

(b) forming two partitions of the received data;

(c) applying admissible geometrization to the ~~doubly~~ partitioned received data to produce admissibly transformed data; and

(d) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide merged data.

28. (Previously Presented) The method for merging data of claim 27 wherein the received data comprises one or more scale types.

29. (Previously Presented) The method for merging data of claim 27 wherein step (b) further comprises the steps of:

(b1) creating one or more data structures from the partitioned received data; and

(b2) associating a scale type to each subset of a partition of the received data.

30. (Previously Presented) The method for merging data of claim 29 wherein in step (b2) the scale types associated to each subset of the partition of the received data correspond to scale types from the received data.

31. (Previously Presented) The method for merging data of claim 29 wherein in step (b1) one or more of the data structures contain one or more elements selected from the group consisting of missing values and augmenting values.

32. (Previously Presented) The method for merging data of claim 29 wherein in step (b1) the one or more data structures comprise one or more complete graphs.

33. (Previously Presented) The method for merging data of claim 32 further comprising mapping the received data to edge weights of the one or more complete graphs

34. (Previously Presented) The method for merging data of claim 29 wherein in step (b1) the one or more data structures comprise one or more symmetric matrices.

35. (Previously Presented) The method for merging data of claim 34 further comprising direct substitution of the received data into the one or more symmetric matrices.

36. (Previously Presented) The method for merging data of claim 34 wherein the symmetric matrices are selected from the group consisting of ideal node matrices and hybrid matrices.

37. (Previously Presented) The method for merging data of claim 34 wherein the symmetric matrices are hollow symmetric matrices.

38. (Currently Amended) The method for merging data of claim 27 wherein step (c) comprises applying 2-partition individual differences multidimensional scaling to the ~~doubly~~ partitioned received data.

39. (Previously Presented) The method for merging data of claim 38 further comprising the steps of:
creating proximity weights; and
applying 2-partition individual differences multidimensional scaling using the proximity weights.

40. (Previously Presented) The method for merging data of claim 38 further comprising the steps of:
applying 2-partition individual differences multidimensional scaling over a plurality of dimensions;
producing admissibly transformed data for each of the plurality of dimensions;
merging the admissibly transformed data from the plurality of dimensions; and
processing the merged admissibly transformed data to provide merged data.

41. (Previously Presented) The method for merging data of claim 38 wherein the admissibly transformed data values are pseudo-distances or disparities.

42. (Previously Presented) The method for merging data of claim 27 wherein step (c) further comprises the step of:
forming commensurate admissibly transformed data.

43. (Previously Presented) The method for merging data of claim 27 wherein the received data are selected from the group consisting of classified data for a predetermined characteristic among a plurality of input domains and measured data for a predetermined characteristic among a plurality of input domains and survey data for a predetermined characteristic among a plurality of input domains and scoring data for a predetermined characteristic among a plurality of input domains and rating data for a predetermined characteristic among a plurality of input domains and ranking data for a predetermined characteristic among a plurality of input domains and preference data for a predetermined characteristic among a plurality of input domains.

44. (Previously Presented) A data merging method comprising the steps of:
(a) receiving data;
(b) creating a plurality of rearrangements of the received data;
(c) applying admissible geometrization to each of the plurality of rearrangements of the received data to produce a plurality of sets of admissibly transformed data;

(d) merging the plurality of sets of admissibly transformed data; and
(e) interpreting the admissibly transformed data as scaled data in processing the merged admissibly transformed data to provide merged data.

45. (Cancelled)

46. (Cancelled)

47. (Currently Amended) A data scaling method comprising the steps of:
(a) receiving intermixed scale type data;
(b) forming two partitions of the received intermixed scale type data;
(c) applying admissible geometrization to the ~~doubly~~ partitioned received intermixed scale type data to produce admissibly transformed data; and
(d) interpreting the admissibly transformed data as scaled data.

48. (Currently Amended) A data scaling method comprising the steps of:
(a) receiving intermixed scale type data;
(b) partitioning the received intermixed scale type data;
(c) forming one or more symmetric matrices from the partitioned received data;
(d) forming a second partition of the received data;
(e) associating a scale type to each subset of the second partition of the received data;
(f) applying admissible geometrization to the ~~doubly~~ partitioned received data to produce admissibly transformed data; and
(g) interpreting the admissibly transformed data as scaled data.

49. (Previously Presented) The data scaling method of claim 48 wherein the one or more symmetric matrices of step (c) further comprise hollow symmetric matrices.

50. (Currently Amended) The data scaling method of claim 48 wherein step (f) comprises applying 2-partition individual differences multidimensional scaling to the ~~doubly~~ partitioned received data.

51. (Cancelled)

52. (Cancelled)

53. (Currently Amended) A method for merging data comprising the steps of:
(a) receiving intermixed scale type data;
(b) forming two partitions of the received intermixed scale type data;
(c) applying admissible geometrization to the ~~doubly~~ partitioned received intermixed scale type data to produce admissibly transformed data; and
(d) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide merged data.

54. (Currently Amended) A method for merging data comprising the steps of:
(a) receiving intermixed scale type data;
(b) partitioning the received intermixed scale type data;
(c) forming one or more symmetric matrices from the partitioned received data;
(d) forming a second partition of the received data;
(e) associating a scale type to each subset of the second partition of the received data;
(f) applying admissible geometrization to the ~~doubly~~ partitioned received data to produce admissibly transformed data; and
(g) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide merged data.

55. (Previously Presented) The method for merging data of claim 54 wherein the one or more symmetric matrices of step (c) further comprise hollow symmetric matrices.

56. (Currently Amended) The method for merging data of claim 54 wherein step (f) comprises applying 2-partition individual differences multidimensional scaling to the ~~doubly~~ partitioned received data.

57. (Previously Presented) A method for prioritizing preference data comprising the steps of:
(a) receiving preference data;
(b) forming two partitions of the received preference data;
(c) applying admissible geometrization to the received preference data to produce admissibly transformed data; and
(d) interpreting the admissibly transformed data as scaled data in processing the admissibly transformed data to provide priorities.

58. (Previously Presented) The method for prioritizing preference data of claim 57 wherein step (b) comprises applying 2-partition individual differences multidimensional scaling to the received preference data.

Allowable Subject Matter

Claims 1-25, 27-44, 47-50 and 53-58 are allowed over the prior art made of record.

Comments

The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply outside the SIX (6) MONTH statutory period or obtain an extension for more than FIVE (5) MONTHS beyond the date for

reply set forth in an Office action. A fully responsive reply must be timely filed to avoid abandonment of this application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

As allowable subject matter has been indicated, Applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CRF 1.111(b) and MPEP section 707.07(a).

Other Prior Art Made of Record

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. U.S. patents and U.S. patent application publications will not be supplied with Office actions. Examiners advises the Applicant that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. For the use of the Office's PAIR system, Applicants may refer to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-217-9197.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane D. Mizrahi whose telephone number is 571-272-4079. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-3900 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Diane Mizrahi
Primary Patent Examiner
Technology Center 2100

January 20, 2007